



Year 1 LTP

BIOLOGY	CHEMISTRY	PHYSICS
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	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12
Science unit	Plants			Animals, including humans			Everyday materials			Seasonal changes		
Scientist(s)	<p>Elizabeth Blackwell A Scottish botanical illustrator and author who was best known as both the artist and engraver for the plates of "A Curious Herbal", published between 1737 and 1739. The book illustrated many odd-looking and unknown plants from the New World, and was designed as a reference work on medicinal plants for the use of physicians.</p>			<p>Steve Backshall A BAFTA-winning English naturalist, writer and television presenter, best known for BBC TV's Deadly 60. His other BBC work includes being part of the expedition teams in Lost Land of the Tiger, Lost Land of the Volcano and Lost Land of the Jaguar.</p>			<p>James Dickson The British scientists John Whinfield and James Dickson first invented polyester cloth in 1941 in England. World War II had made it hard to get cotton, and British people needed clothes to wear! After World War II was over, in 1945, the United States company DuPont bought the right to make polyester.</p>			<p>James Croll Provided the first mechanism accounting for ice ages; said climate change is caused by periodic changes in Earth's orbit affecting the amount of energy received from the sun; devised the concept of ice-albedo feedback.</p>		
Scientific knowledge	<ul style="list-style-type: none"> identify and name a variety of common wild and garden plants, including deciduous and evergreen trees P1 (a,b) identify and describe the basic structure of a variety of common flowering plants, including trees P2 (a,b) 			<ul style="list-style-type: none"> identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals AIH 1 identify and name a variety of common animals that are carnivores, herbivores and omnivores describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets) AIH3 			<ul style="list-style-type: none"> distinguish between an object and the material from which it is made. EM1 identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. EM2 describe the simple physical properties of a variety of everyday materials EM3 (a,b) compare and group together a variety of everyday 			<ul style="list-style-type: none"> observe changes across the 4 seasons SC1 observe and describe weather associated with the seasons and how day length varies SC2 (a,b,c) 		

		<ul style="list-style-type: none"> identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. AIH4 (A,B) 	materials on the basis of their simple physical properties EM4	
Working scientifically skills	<p>During Year 1, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of our spiral curriculum:</p> <ol style="list-style-type: none"> 1 asking simple questions and recognising that they can be answered in different ways 2 observing closely, using simple equipment 3 performing simple tests 4 identifying and classifying 5 using their observations and ideas to suggest answers to questions 6 gathering and recording data to help in answering questions 			
Investigation Opportunities: which Working Scientifically skills can they show? Taken from Hamilton Trust	<p>Plants</p> <p>P1) identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p>A) Do leaf rubbings, play guess the leaf (discuss features) and then create a large piece of art on the floor WS SKILLS 4,5,6</p> <p>B) Explore the allotment area and look at plants that are growing. Talk about what they are and what they will look like when they are fully grown. Map out the school garden area and decorate with sketches, facts and labels. WS SKILLS ALL</p> <p>P2) identify and describe the basic structure of a variety of common flowering plants, including trees</p> <p>A) Ever wondered what is inside a flower? Take a look at flowers- dissect them together, can children identify parts from Vocab needed? WS SKILLS ALL.</p> <p>B) Draw what is on the trees- children draw under instruction of teacher.i.e. The first tree is a fruit tree, draw me some fruit that might grown on it. The shrub is a berry bush, draw me some fruit that might grow on it. This plant grows fruit, draw me some fruit that might grow from it etc. WS SKILL 5</p> <p>Animals including Humans</p> <p>AIH1) identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</p> <p>a) Go on an exploration around the school grounds, looking at animals' behaviours and habitats. Talk about the behaviour patterns you can see and consider: do similar animals live in similar places? WS SKILLS 1,2,3,4,5</p> <p>AIH2) identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p>AIH3) describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</p>			

a) Consider why some animals are kept as pets and others aren't. Then design your own imaginary good pet and imaginary bad pet WS SKILLS 1,2,3

AIH4) identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

A) Look carefully at our bodies and collect data about head size, hand and foot size, hair and eye colour. Consider questions like: If someone has big hands, do they have a better sense of touch? If someone has bigger feet, do they balance better? WS SKILLS 1,2,3,4

B) Play games like charades or mimicry (sight), Marco Polo (hearing), taste tests (tasting), what's in the box? (touch).

Everyday Materials

EM1) distinguish between an object and the material from which it is made

A) Play 'I-Spy the Material' game in the classroom, before discussing why different materials have been used I.e I spy a ruler... what material is this? I spy something wooden... why is this made of wood? Sort items according to their properties and consider what it would be like if the tables were made of jelly or the chairs were chocolate! WS SILLS ALL

EM2) identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock

A) Play 'I-Spy the Material' game in the classroom, before discussing why different materials have been used, as above. Use scientific vocab. WS SILLS ALL

EM3) describe the simple physical properties of a variety of everyday materials

A) Play 'odd one out' e.g. give children 2 bendy and one rigid material or 2 made of wood and one made of metal, or 1 that was liquid and 2 that were solid, which is the odd one out, why? Children to devise their own/ partner. WS SILLS ALL

B) Watch a block of ice melt/ Working with play figures frozen in ice, devise an investigation to release them. How can you melt the ice quickly to free the figure? What is happening to the ice? WS SILLS ALL

EM4) compare and group together a variety of everyday materials on the basis of their simple physical properties

A) Listen to the story of the three little pigs and, in small groups, recreate houses using straw, twigs and bricks. Make predictions and a video, or alternative 3 little pigs depending on materials available. WS SILLS ALL

Seasonal Changes

SC1) observe changes across the 4 seasons

A) Make a seasons collage/ mural/drawing – this begins like chinese whispers, only 4 children in class are given a season (one is given spring, one is given summer etc) and they have to keep it a secret. They can only draw something that links to that season, the papers then get sent around the classroom and children add to them, without knowing the season, but from only recognising what has already been drawn. WS SILLS ALL

	<p>SC2) observe and describe weather associated with the seasons and how day length varies</p> <p>A) Make a weather forecast/ weather station- wind sock, rain gauge, thermometer and measure these on the playground WS SILLS ALL</p> <p>B) Shadow length investigation- does this change throughout the day (can chalk these onto the playground) WS SILLS ALL</p> <p>C) Explore puddles outside and observe what happens to a puddle over time and record the results (measure or chalk around them at intervals) WS SILLS ALL</p>			
Scientific vocabulary	Deciduous, Evergreen trees, Leaves, Flowers (blossom), Petals, Fruit, Roots, Bulb, Seed, Trunk, Branches, Stem	Fish, Reptiles, Mammals, Birds, Amphibians (+ examples of each), Herbivore, Omnivore, Carnivore, Leg, Arm, Elbow, Head, Ear, Nose, Back, Wings, Beak	Wood, Plastic, Glass, Paper, Water, Metal, Rock, Hard, Soft, Bendy, Rough, Smooth	Summer, Spring, Autumn, Winter, Sun, Day, Moon, Night, Light, Dark

***Cycle of 12 weeks repeated each term**